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ABSTRACT OF THE DISCLOSURE

A waveguide device in the form of either a solid-state laser or amplifier is divided into separate pumping and output mode control sections along at least one direction of the device by leaving a portion of a core of the device unclad or by depositing appropriate coatings on different sections of the core or by contacting/bonding materials with different refractive indices to different sections of the core or by a combination of these approaches. The core has a pump input surface for receiving pumping radiation at a pumping wavelength and one or more output surfaces for emitting a laser beam at an output wavelength. When used as an amplifier, the core also has a laser input surface which may be the same as one of the output surfaces.